

## INDUCTIVELY COUPLED PLASMA SPECTROMETER FOR PROCESS DIAGNOSTICS AND CONTROL

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**Abstract:** The present invention relates to an apparatus and method for forming a plasma in the exhaust line of a primary process reactor. The plasma is generated in an inductive source (5) to examine the chemical concentrations of the waste or exhaust gas in vacuum lines that are below atmospheric pressure.

The optical radiation emitted by the plasma is analyzed by an optical spectrometer (9) and the resulting information is used to diagnose, monitor, or control operating states in the main vacuum vessel.